

ULK3 (N-24): sc-130614

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. ULK3 (unc-51-like kinase 3) is a 214 amino acid protein that contains one protein kinase domain and functions to catalyze the ATP-dependent phosphorylation of target proteins. The gene encoding ULK3 maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome.

REFERENCES

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2. Hanks, S.K., Quinn, A.M. and Hunter, T. 1988. The protein kinase family: conserved features and deduced phylogeny of the catalytic domains. *Science* 241: 42-52.
3. Hanks, S.K. and Quinn, A.M. 1991. Protein kinase catalytic domain sequence database: identification of conserved features of primary structure and classification of family members. *Meth. Enzymol.* 200: 38-62.
4. Vuori, K.A., Nordlund, E., Kallio, J., Salakoski, T. and Nikinmaa, M. 2008. Tissue-specific expression of aryl hydrocarbon receptor and putative developmental regulatory modules in Baltic salmon yolk-sac fry. *Aquat. Toxicol.* 87: 19-27.
5. Daub, H., Olsen, J.V., Bairlein, M., Gnad, F., Oppermann, F.S., Körner, R., Greff, Z., Keri, G., Stemmann, O. and Mann, M. 2008. Kinase-selective enrichment enables quantitative phosphoproteomics of the kinome across the cell cycle. *Mol. Cell* 31: 438-448.

CHROMOSOMAL LOCATION

Genetic locus: ULK3 (human) mapping to 15q24.1; Ulk3 (mouse) mapping to 9 B.

SOURCE

ULK3 (N-24) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of ULK3 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

ULK3 (N-24) is recommended for detection of ULK3 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ULK3 siRNA (h): sc-89940, ULK3 siRNA (m): sc-154915, ULK3 shRNA Plasmid (h): sc-89940-SH, ULK3 shRNA Plasmid (m): sc-154915-SH, ULK3 shRNA (h) Lentiviral Particles: sc-89940-V and ULK3 shRNA (m) Lentiviral Particles: sc-154915-V.

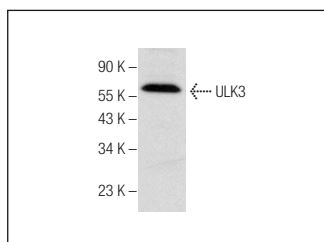
Molecular Weight of ULK3 isoforms 1/2: 53/24 kDa.

Positive Controls: Human heart tissue extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ULK3 (N-24): sc-130614. Western blot analysis of ULK3 expression in human heart tissue extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.